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EXAMINER

GARCIA, SANTIAGO

ART UNIT	PAPER NUMBER
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2611

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ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No. 10/583,077	Applicant(s) SPINDLER ET AL.	
	Examiner SANTIAGO GARCIA	Art Unit 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, with regard to claims 20-26, filed 07/07/09 have been fully considered but they are not persuasive. On page 9 of Applicant's response, applicant argues that Thierry (WO 99/60510) does not teach that SHIFT and MUTATED signals do not contain synchronization information and as such, there is no correspondence to the claimed invention.

The examiner respectfully disagrees with Applicant's arguments, because Thierry **does not teach** that SHIFT and MUTATED signals contain synchronization information. Examiner respectfully request applicant to point out in official translation of Thierry to show where SHIFT and MUTATED signals contain synchronization information, making applicant arguments persuasive.

Applicant also argues that an official translation is not provided. Accurate and complete translation of Thierry (WO 99/60510) is provided as an attachment. Examiner again respectfully request of applicant to show that SHIFT and MUTATED signals contain synchronization information, making applicant's argument of SHIT and MUTATED signals do not contain any synchronization information valid.

2. Applicant's arguments with respect to claims 1-19 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2, 4, 5, 9, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over 5,940,006 to MacLellan et al, in view of patent number 6,430,209 to Shigyo et al and further in view of Roz (WO .

MacLellan teaches:

1. As per claim 1, **an RFID device for non-contact communication with a reading device via** (MacLellan, Fig.1 Interrogator is the RFID device or reader and Tags 102-1 to Ns are the devices.)

modulated electromagnetic signals (SS), (MacLellan, Abstract: A Time Division Multiple Access (TDMA) duplex radio communication system uses an Interrogator to generate a first radio signal by modulating a first information signal onto a radio carrier signal which is sent to at least one remote Tag of the system.”)

that contain at least one of data and or commands packed in data frames,

(MacLellan, FIG. 5 expands the PAMA method shown in FIG. 4 in which a specific Tag is sent a command and/or data)

synchronizing means configured to effect synchronization of the RFID device

(MacLellan, Fig.9 the transponder detector with the processor having a fixed clock gives the sync means.)

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by synchronizing information (Preamble, Start Delimiter) contained in received data frames (MacLellan, Fig.1 and 2 Downlink signal is to synchronize. The received frames are in the downlink signal going from the interrogator to the tag. Fig.9 the transponder detector with the processor having a fixed clock gives the sync means.

Where sync is preamble and OpCode is Start Delimiter)

from which it receives data frames, (MacLellan, Fig.2 uplink signal 105. Receiving data frames from transponder.)

MacLellan does not teach:

and with synchronization status test means configured to detect whether the RFID device runs synchronously with at least one other RFID device of the RFID system,

and in the event of not running synchronously to switch on the synchronizing means in which event the synchronizing means can preferably be switched off automatically after the synchronization has been effected.

Shigyo Teaches:

and with synchronization status test means configured to detect whether the RFID device runs synchronously with at least one other RFID device of the RFID system, (Shigyo, Column 3-4, lines 66-67, Column 4 line 1 "Then ID certifying process is driven whether the ID of the present apparatus agrees with the ID carried by the sync-recovered signal in order to identify the signal." ID of present apparatus is "one other RFID device" and is testing against the sync signal.)

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and in the event of not running synchronously to switch on the synchronizing means in which event the synchronizing means can preferably be switched off automatically after the synchronization has been effected. (Shigyo, Fig.2 Step 12 to Step 19 if synchronization is present then there is no need for extra synchronization. If there is no synchronization then the synchronization is started in Step 13.)

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use Shigyo's teachings of shutting sync means off as an added feature of the RFID device of MacLellan.

The motivation to combine would be to reduce power consumption of the RFID device and therefore be more efficient.

Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of MacLellan and Shigyo to obtain the invention of claim 1.

Machlellan in view of Shigyo does not clearly teach, responsive to detecting that the RFID device is not synchronized with the reading device, wherein the RFID device is configured to receive multiple different types of commands as groups of data frames from the reading device, and wherein at least one of the received commands does not contain synchronizing information for effecting synchronization of the RFID device with the reading device.

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Roz teaches, responsive to detecting that the RFID device is not synchronized with the reading device (Roz, This reference only mentions synch information in INT command and not in the SHIFT or MUTE command), wherein the RFID device is configured to receive multiple different types of commands as groups of data frames from the reading device (Roz, INT command and SHIFT or MUTE command, see fig.1-5), and wherein at least one of the received commands does not contain synchronizing information for effecting synchronization of the RFID device with the reading device (Roz, This reference only mentions synch information in INT command and not in the SHIFT or MUTE command).

Therefore it would have been obvious to one of ordinary skill in the art to incorporate Roz into MacLellan in view of Shigyo as taught by Roz.

The motivation would be to have a more efficient system and not send unneeded synchronization information twice, and by doing that the system also saves power.

2. As per claim 2:

MacLellan in view of Shigyo and further in view of Roz teaches:

An RFID-device as claimed in claim 1, (Refer to claim 1 rejection)

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in which the synchronizing means are configured in such a manner

that every received data frame is to be treated as a data frame

containing synchronization information. (MacLellan, Fig.1 and 2 The only

other signal being received is a constant wave CW 104 which is not a data frame. The

only data frames being transmitted are the SYNC 201 and Op Code which go into

synchronization means fig.9.)

4. As per claim 4:

MacLellan in view of Shigyo and further in view of Roz teaches:

An RFID device as claimed in claim 3,

in which the synchronization status test means are configured to

switch off the synchronizing means in the event of a correctly

received data frame. (Shigyo, Fig.2 Step 12 to Step 19 if synchronization

is present then there is no need for extra synchronization meaning

synchronization means is off. If there is no synchronization then the

synchronization is started in Step 13.)

5. As per claim 5:

MacLellan in view of Shigyo and further in view of Roz teaches:

An RFID device as claimed in claim 1,

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in which the synchronization status test means (Shigyo, fig.2 Step 12 to "ID agreement".) **are configured for detection of the synchronization start signals in the received electromagnetic signals,** (Shigyo, fig.2 "Sync acquisition?" Step 12 is part of the status test means and in Step 11 "Communication in progress?" is the start signal of the synchronization.) **which synchronization start signals are transmitted outside the data frame,** (Shigyo, fig.2 Step 11 is outside of the sync command which is the data frame.) **where the synchronization status test means switch on the synchronizing means on detection of a synchronization start signal.** (Shigyo, fig.2 In Step 11 if communication is in progress then the flow chart goes to Step 12 Synch acquisition which is the start of the synchronizing.)

9. As per claim 9:

MacLellan in view of Shigyo and further in view of Roz teaches:

An RFID-device as claimed in claim 1, (Refer to claim 1 rejection) **comprising synchronization status test means** (Shigyo, Column 3-4, lines 66-67, Column 4 line 1 "Then ID certifying process is driven whether the ID of the present apparatus agrees with the ID carried by the sync-recovered signal in order to

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identify the signal.” ID of present.) **and two synchronizing means**, (MacLellan, Fig.9 906 and 907.) **which can be run alternately in such a manner that one of the synchronizing means process every received data frame as a data frame containing synchronization information and try to read their synchronization information (Preamble, Start Delimiter) for executing a synchronization routine**, (MacLellan, Fig.9 106 Frequency synthesizer.) **while the other synchronizing means forward every received data frame to the next data frame processing means**, (Fig.9 905 to 907 is taking the Data to the next processing means.) **where the operation of the two synchronization means is switched over if a synchronization routine of a synchronization unit is successful.** (MacLellan, Fig.9 907 to 902.)

10. As per claim 10:

MacLellan in view of Shigyo and further in view of Roz teaches:

An RFID-device as claimed claim 1,

in which the RFID-device is configured as a reading device or transponder. (Mclellan, fig.1 Interrogator 101 is configured as a reading device and Tags 102-1 is configured as a transponder.)

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11. As per claim 11:

MacLellan teaches:

An RFID system, comprising at least one reading device and at least

one transponder (MacLellan, Fig.1 Interrogator is the RFID device or reader and

Tags 102-1 to Ns are the devices.) **configured for non- contact**

communication by means of modulated electromagnetic signals

which contain data and commands packed in data frames, (MacLellan,

Abstract: A Time Division Multiple Access (TDMA) duplex radio communication system

uses an Interrogator to generate a first radio signal by modulating a first information

signal onto a radio carrier signal which is sent to at least one remote Tag of the system.”

FIG. 5 expands the PAMA method shown in FIG. 4 in which a specific Tag is sent a

command and/or data;)

in which the transponder has synchronization means which are

configured to effect synchronization with the reading device with the

help of synchronization information contained in received data frames

(MacLellan, fig.9 Detector, Clock Recovery and Processor of the transponder.)

MacLellan does not teach:

and synchronization status test means configured for detecting

whether the transponder runs synchronously with the reading device

Shigyo teaches:

and synchronization status test means configured for detecting whether the transponder runs synchronously with the reading device

(Shigyo, Column 3-4, lines 66-67, Column 4 line 1 “Then ID certifying process is driven whether the ID of the present apparatus agrees with the ID carried by the sync-recovered signal in order to identify the signal.” ID of present.)

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use Shigyo’s teachings of shutting sync means off as an added feature of the RFID device of MacLellan.

The teachings Shigyo would be combined with MacLellan to reduce power consumption of the RFID device and therefore be more efficient.

Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of MacLellan and Shigyo to obtain the invention of claim 11.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use Shigyo’s teachings of shutting sync means off as an added feature of the RFID device of MacLellan.

The motivation to combine would be to reduce power consumption of the RFID device and therefore be more efficient.

Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of MacLellan and Shigyo to obtain the invention of claim 1.

Machlellan in view of Shigyo does not clearly teach, responsive to detecting that the RFID device is not synchronized with the reading device, wherein the RFID device is configured to receive multiple different types of commands as groups of data frames from the reading device, and wherein at least one of the received commands does not contain synchronizing information for effecting synchronization of the RFID device with the reading device.

Roz teaches, responsive to detecting that the RFID device is not synchronized with the reading device (Roz, This reference only mentions synch information in INT command and not in the SHIFT or MUTE command), wherein the RFID device is configured to receive multiple different types of commands as groups of data frames from the reading device (Roz, INT command and SHIFT or MUTE command, see fig.1-5), and wherein at least one of the received commands does not contain synchronizing information for effecting synchronization of the RFID device with the reading device (Roz, This reference only mentions synch information in INT command and not in the SHIFT or MUTE command).

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Therefore it would have been obvious to one of ordinary skill in the art to incorporate Roz into MacLellan in view of Shigyo as taught by Roz.

The motivation would be to have a more efficient system and not send unneeded synchronization information twice, and by doing that the system also saves power.

12. As per claim 12:

MacLellan in view of Shigyo and further in view of Roz teaches:

An RFID system as claimed in claim 11, (Refer to claim 11 rejection)

in which the reading device is configured to register the inventoring (not mentioned before) commands, (MacLellan,[004] Radio Frequency Identification (RFID) systems are used for identification and/or tracking of equipment, inventory, or living things.) **by which each transponder present in an effective area of the reading device,** (MacLellan, Detailed description: (4) "In other applications, RFID Tags may be attached to every item on the shelves of supermarkets, and these RFID Tags interrogated as the shopping cart is passed under (or through) an Interrogator reading field. In this application, far beyond 50 Tags may need to be in the reading field.") **is asked to report to the reading device to send in a data frame containing synchronization information.** (MacLellan, Fig.1 Uplink signal

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105 is sending back the Tag ID which can be considered synchronization information.)

14. As per claim 14:

MacLellan in view of Shigyo and further in view of Roz teaches:

An RFID system as claimed in claim 13 (Refer to claim 13 rejection),
in which the synchronization status test means are configured to
switch off the synchronizing means in the event of a correctly
received data frame. (Shigyo, Fig.2 Step 12 to Step 19 if synchronization is present then there is no need for extra synchronization meaning synchronization means is off. If there is no synchronization then the synchronization is started in Step 13.)

19. As per claim 19:

MacLellan in view of Shigyo and further in view of Roz teaches:

An RFID system as claimed in claim 11, **comprising synchronization status test means** (Shigyo, Column 3-4, lines 66-67, Column 4 line 1 "Then ID certifying process is driven whether the ID of the present apparatus agrees with the ID carried by the sync-recovered signal in order to identify the signal." ID of present.)

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and two synchronizing means (MacLellan, Fig.9 906 and 907.) **which can be run alternately in such a manner that one of the synchronizing means processes every received data frame as a data frame containing synchronization information and tries to read their synchronization information for executing a synchronization routine,** (MacLellan, Fig.9 106 Frequency synthesizer.) **while the other synchronizing means forwards every received data frame to the next data frame processing means** (MacLellan, Fig.9 905 to 907 is taking the Data to the next processing means.) **where the operations of the two synchronization units are switched over if a synchronization routine of one synchronization means is successful.** (MacLellan, Fig.9 907 to 902.)

3. Claims 3, 8, 13, 18 rejected under 35 U.S.C. 103(a) as being unpatentable over patent number 5,940,006 to MacLellan et al in view of reference patent number 6,430,209 to Shigyo, and further in view of Roz (WO 99/60510) and further in view of 20030003942 to Okumura.

3. As per claim 3:

MacLellan in view of Shigyo and further in view of Roz teach:

An RFID device as claimed in claim 1,

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Shigyo teaches:

in which the synchronization status test means (Shigyo, Column 3-4, lines 66-67, Column 4 line 1 “Then ID certifying process is driven whether the ID of the present apparatus agrees with the ID carried by the sync-recovered signal in order to identify the signal.” ID of present apparatus is “one other RFID device” and is testing against the sync signal.)

to switch on the synchronizing means. (Shigyo, Fig.2 Step 12 to Step 19 if synchronization is present then there is no need for extra synchronization. If there is no synchronization then the synchronization is started in Step 13. The error rate measurement)

MacLellan and Shigyo do not teach:

to cooperate with a data frame error counter to count the number of erroneously received data frames
and in the event of exceeding of a specified error limit,

Okumura teaches:

to cooperate with a data frame error counter to count the number of erroneously received data frames (Okumura, fig. 4 and fig.5 flow chart.

“ [0056] If there is an error (YES in S3), the counter increments the number of error frames by +1 (S4). The error counting is being done by the error

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rate measurement unit 123 is fig.4) **and in the event of exceeding of a specified error limit**, (Okumura,[0057] “a frame error rate (FER=ratio of the number of error frames to the number of received frames) is calculated from the currently obtained received frames and the error frames (S7). The calculated FER is output from the error rate measuring unit 123,”)

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use Okumura's teachings of having an error counter in Shigyo's receiver to measure how many error frames are received. Further also to have Okumura's error rate measurement device inside of Shigyo's receiver to have a way of calculating the error limit.

The teachings Shigyo would be combined with Okumura to be able to have the synchronization means off while the receiver is receiving synchronized data frames therefore saving power.

Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Okumura and Shigyo to obtain the invention of claim 3.

8. As per claim 8:

MacLellan and further in view of Shigyo and Roz and Okumura teach:

An RFID-device as claimed in claim 1, (Refer to claim 1 rejection)

in which the synchronization status test means operate (Shigyo,

Column 3-4, lines 66-67, Column 4 line 1 “Then ID certifying process is

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driven whether the ID of the present apparatus agrees with the ID carried by the sync-recovered signal in order to identify the signal." ID of present apparatus is "one other RFID device" and is testing against the sync signal.)

with a Watchdog- Timer (Okumura, "Then, timer process for timing a predetermined time is started (S33), and the counter value N is incremented by +1 when the time is up (S34). The timing (S33) and the increment (S34) are repeated during the idle period (YES in S13), and the counter value N is incremented one by one every predetermined time interval.")

to switch on the synchronizing means (Shigyo, Fig.2 Step 12 to Step 19 if synchronization is present then there is no need for extra synchronization. If there is no synchronization then the synchronization is started in Step 13.)

at the lapsing of a specified interval, (Okumura, "Then, timer process for timing a predetermined time is started (S33), and the counter value N is incremented by +1 when the time is up (S34). The timing (S33) and the increment (S34) are repeated during the idle period (YES in S13), and the counter value N is incremented one by one every predetermined time

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interval.”) **during which no correct data frame could be received.** (, (Okumura,[0057] “a frame error rate (FER=ratio of the number of error frames to the number of received frames) is calculated from the currently obtained received frames and the error frames (S7). The calculated EFR is output from the error rate measuring unit 123,” The FER is computed from error frames.)

13. As per claim 13:

MacLellan and further in view of Shigyo and Roz and Okumura teach:

An RFID system as claimed in claim 11, in which the synchronization status test means operate with a data frame error counter to count the number of erroneously received data frames (Okumura, fig. 4 and fig.5 flow chart. “ [0056] If there is an error (YES in S3), the counter increments the number of error frames by +1 (S4). The error counting is being done by the error rate measurement unit 123 is fig.4) **and in the event of exceeding of a specified error limit, to switch on the synchronizing means.** (Okumura,[0057] “a frame error rate (FER=ratio of the number of error frames to the number of received frames) is calculated from the

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currently obtained received frames and the error frames (S7). The calculated EFR is output from the error rate measuring unit 123,")

18. As per claim 18:

MacLellan and further in view of Shigyo and Roz and Okumura teach:

An RFID system as claimed in claim 11, (Refer to claim 11 rejection)

in which the synchronization status test means operate (Shigyo, Column 3-4, lines 66-67, Column 4 line 1 "Then ID certifying process is driven whether the ID of the present apparatus agrees with the ID carried by the sync-recovered signal in order to identify the signal." ID of present apparatus is "one other RFID device" and is testing against the sync signal.)

with a Watchdog- Timer, (Okumura, "Then, timer process for timing a predetermined time is started (S33), and the counter value N is incremented by +1 when the time is up (S34). The timing (S33) and the increment (S34) are repeated during the idle period (YES in S13), and the counter value N is incremented one by one every predetermined time interval.")

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to switch on the synchronizing means (Shigyo, Fig.2 Step 12 to Step 19 if synchronization is present then there is no need for extra synchronization. If there is no synchronization then the synchronization is started in Step 13.) **alter the lapsing of a specified interval**, (Okumura, “Then, timer process for timing a predetermined time is started (S33), and the counter value N is incremented by +1 when the time is up (S34). The timing (S33) and the increment (S34) are repeated during the idle period (YES in S13), and the counter value N is incremented one by one every predetermined time interval.”) **during which no or no correct data frame could be received.** (Okumura,[0057] “a frame error rate (FER=ratio of the number of error frames to the number of received frames) is calculated from the currently obtained received frames and the error frames (S7). The calculated EFR is output from the error rate measuring unit 123,” The FER is computed from error frames.)

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 20-26 rejected under 35 U.S.C. 102(b) as being anticipated by WO 99/60510 to Roz Thierry et al published on November 25, 1999.

20. As per claim 20:

An anti-collision method for determining a number of transponders in an effective area of a reading device, the reading device communicating with the transponders without contact by means of modulated electromagnetic signals, (Roz, fig.1 and Abstract) which contain data and or commands packed in data frames (Roz, fig. 7b INT is the data frame which has data or commands;) in which the reading device transmits an inventory command for determination of the transponders present in its effective area, by which command each transponder present in the effective area of the reading device is asked to transmit a response with a unique identification number to the reading device, (Roz “Generally, you unit of reading 20 with the possibility of typically questioning the Tri transponders put in awakening by emitting a signal of

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interrogation INT comprising in a modulation of the electromagnetic field 1. This signal of interrogation INT indicates to the TRi transponders that the unit of reading 20 wishes to receive a signal of REPj

answer including understanding required information, typically an identifying code of the transponder.” By the reader needing to understand the ID code the reader is doing invenorizing.) **transmitting by the reading device transmits a repeat command in case there are mutually colliding responses from several7 transponders** (Roz, fig.5: 510 Collision interrogator to 511 Indicates the collision to 512 Emits the SHIFT signal to 518 which repeats the command to synch again.) **which command causes the transponders to send the response once more** (Roz, 518 causes fig 6 609 to occur more times.) **and in which the reading device on the transponder whose response was received without errors,** (Roz Fig 5: 510 collision detect going to 560 SLOT control unit going to 514 memory then going to 516 which emits response without errors.) **sends a Confirm command, which causes this transponder not to react to repeat commands,** (Roz, fig. 5: 516 which emits response without errors to fig.6 612 receiving the repeat command and going to 614 causing the tag not to react again.)

and are command not containing the synchronization information (Roz, This reference only mentions synch information in

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INT command and not in the SHIFT or MUTE command),
and the confirm command does not contain any synchronization information
(Roz, INT command and SHIFT or MUTE command, see fig.1-5), and
wherein at least one of the received commands does not contain synchronizing
information for effecting synchronization of the RFID device with the reading
device (Roz, This reference only mentions synch information in INT
command and not in the SHIFT or MUTE command),,

in which the reading device continues transmission of Confirm commands and Repeat commands,(Roz fig.5 looping from 516 confirm command or 511 repeat command looping back to 502 INT emission.) until no transponder responds any longer within a specified time interval,
(Roz, Fig.7b shows the signal MUTE which is repeated in the specified interval of the SLOTS1-SLOTS8 until it finds no more success frames being transmitted.).

21. As per claim 21:

Roz teaches:

An anti-collision method as claimed in claim 20, in which the transponders respond to the reading device at randomly selected

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delays. (Roz, “Moreover, owing to the fact that the top signals of answer are transmitted with intervals of random times,” The signals of answers are by the transponder which select SLOTS1-8 at random times.)

22. As per claim 22:

Roz teaches:

An anti-collision method as claimed in claim 21, in which the delay selectable by the transponder lies in a round, (Roz, Fig. 7b) which has a number of time slots which are pre-defined and possibly variable by the reading device with durations, (Roz, Fig. 7b SLOT1-SLOT8 are pre-defined. Thus, in accordance with what is schematized in figure 4, following the emission of the signal of interrogation INT by the unit of reading 20, a whole of N fentres $SLOT_k$ ($k=1$ with N) is generated. Each TR_j transponder includes/understands means to select, according to a random process, a fentre of particular answer among 1 ' whole of N fentres of available $SLOT_k$ answers during which it will emit its signal of $REPi$ answer.”) **which are defined and possibly variable by the reading device. (Roz, “INT by the unit of reading 20, a whole of N fentres $SLOT_k$ ($k=1$ with N) is generated.”)**

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23. As per claim 23:

Roz teaches:

An anti-collision method as claimed in claim 22, **in which the reading device transmits nothing more than a Confirm command or a Repeat command per time slot**, (Roz, Fig. 7b MUTE and SHIFT commands are coming from the reading device per time slot.) **where a time slot is optionally early scheduled by these commands.** (Roz, INT would be considered as the early time slot. Early time slot is not mentioned in the specification.)

24. As per claim 24:

Roz teaches:

An anti-collision method as claimed in claim 22,
in which the Repeat command triggers the transponders to start a new round. (Roz, fig. 5 Emission SHIFT 512 is the repeat command which goes to 504 which asks if it is the end of a cycle or round. If it is the end of the cycle and there are collisions detected then the process starts again on 502 emitting the INT signal which starts the next round.)

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25. As per claim 25:

Roz teaches:

An anti-collision method as claimed in claim 22, **in which the reading device sends a Next Time Slot command**, (Roz, Fig.5 step 508 determines if there is a response from a tag.) **if no transponder responds within a time slot**, (Roz, Fig.5 and Fig.7b to the right “non” means no. Meaning if there is no REP which is the response from the transponder the cycle goes to triggering the SHIFT to get to the next time slot.) **where the Next-Time slot command is preferably sent in a data frame with synchronization information.** (Roz, Fig. 5 “to emit a signal of interrogation (INT) allowing synchronization of the aforesaid transponders (TRj).” INT also shown in figure 7b which is the synch frame. After no transponder has been detected the flow chart goes back to INT which is the synchronization frame.)

26. As per claim 26:

Roz teaches:

An anti-collision method as claimed in claim 22, **in which the anti-collision method is scheduled if no transponder responds within a**

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round. (Roz, Fig.5 If no transponders respond in 508 then that signal gets sent to 504 which asks if it is the end of the round in which case triggers 502 which sends out INT frame which is used for synchronization.)

Conclusion

2. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SANTIAGO GARCIA whose telephone number is (571)270-5182. The examiner can normally be reached on MONDAY- FRIDAY 7:30 AM - 5:00 PM EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hai Tran can be reached on (571) 272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SG/

/CHIEH M FAN/
Supervisory Patent Examiner, Art Unit 2611